

## PATENT SPECIFICATION



Application Date: Sept. 19, 1930. No. 28,009/30.

363,637

Complete Left: April 22, 1931.

Complete Accepted: Dec. 21, 1931.

## PROVISIONAL SPECIFICATION.

## Process and Improvement in the Manufacture and Casting of Cement Products.

I, WALTER GARTNER, 2, Home Glen, Wellesley Road, Twickenham, Middlesex, of German Nationality, do hereby declare the nature of this invention to be as follows:—

5 This invention relates to the manufacture of fire place surrounds, hearths, kerbs, panels in concrete or similar material to give the effect of slabbed tile articles, which are usually made from loose tiles and slabbed in concrete or plaster or similar substance, and which is more or less costly, also always depending on the right supply of tiles.

15 The method of much cheaper manufacture of these articles is to make these, instead of slabbing of loose tiles, out of concrete or other cementitious material, which can be coloured or cold glazed or different aggregates can be used to imitate the appearance of granite marble, tiles or any other effect, by

casting these in special moulds in one or different pieces.

25 In order to imitate slabbed tile surfaces, these special and new moulds are provided with raised narrow partitions, dividing the surface in tile sizes, which leaves in the cast product the inverted or deepened joints, leaving the appearance of being slabbed of usual loose tiles. These raised narrow partitions in the mould can either be triangular, square, oblong or rounded off shape. These joints in the manufactured article can either be filled with plaster, cement or other material or they can be left as deepened joints, which of course can be improved by painting these joints, which makes a very attractive surface and quite unique new appearance of being slabbed of loose tiles with bevelled or round edges.

Dated the 18th September, 1930.

WALTER GARTNER.

## COMPLETE SPECIFICATION.

## Process and Improvement in the Manufacture and Casting of Cement Products.

45 I, WALTER GARTNER, of 2, Home Glen, Wellesley Road, Twickenham, Middlesex, of German Nationality, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

50 This invention relates to the manufacture and casting of cement products, and has for its object the production of cement cast articles, such as fire-places, surrounds, hearths, curbs, panels or the like wherein the effect of slabbed tiles or brick articles is obtained in place of such articles, which are usually made from loose tiles or bricks, embedded on and slabbed in concrete, plaster, or allied substance.

60 When these tile or brick articles are manufactured according to known methods, there is always the risk of lack of key or adherence between the tiles and

the concrete or other cementitious material, or again, in transit the tiles or glazed bricks are liable to defacement or detachment, or when in use they are liable to separate due to differing coefficients of expansion when exposed to heat.

70 According to the present invention a method of forming imitation tiled or brick objects by moulding aggregate with surface grooves to imitate the jointing marks between tiles or bricks is provided wherein the said jointing marks are produced by ribs forming a fixed part of the mould or detachable as a unit therefrom. The invention also consists in filling the spaces between the ribs in the mould with a surfacing material which is preferably of a coloured or ornamental character and which is screeded off to a uniform depth before adding the final aggregate.

85 In order that the invention can be

readily understood, reference is made to the accompanying drawings, in which:—

Fig. 1 is a part sectional perspective elevation of a panel or hearth mould,

Fig. 2 shows a detachable surface plate or pallet,

Fig. 3 shows a modification in which tile or brick markings are a separate entity ready for application to a plain mould and

Fig. 4 shows a complete fire-place, with hearth and curb, in part sectional elevation.

Referring to the drawings the mould 1 may be formed in any known manner, and is provided with a face plate 2, formed integrally with said mould or laid thereon as a detachable member (see Fig. 2). Upon said face-plate 2 are provided raised tile marks 3. These tile joint marks may be of any convenient section and height, depending upon the appearance desired for the finished cast object. For example they may be triangular, square, rectangular or with rounded or bevelled corners. Preferably, they taper upwards with rounded angles, so as to provide means for leaving readily the cast article.

In manufacturing these face plates for the moulds 1, the ribbing or tile marks 3 may be cast integrally with the face plate, as shown in Fig. 2 or the tile marks may be built up from wrought metal or cast and provided for as a separate entity in the form of a grid as shown in Fig. 3, dowel pins 4 being provided for insertion in the corresponding dowel holes in the face plate for accurate alignment and retention. The aggregate to be cast into the mould may be homogeneous aggregate, or the aggregates may differ and be cast into the mould in separate layers. Thus the aggregate may contain an even distribution of coloured but characteristic coarse mineral such as granite, crushed glass, slate, crushed pottery or the like, or alternatively the casting may have a first layer of coloured cement, crushed vitreous aggregate, or kindred characteristic facing, which is then screeded off to the level of the rib height, a less expensive filling of cementitious material being added as a backing to fill the mould, which then may be finally screeded off in the ordinary way. Where pallet surface plates are employed, these may be removed from any mould having detachable or hinged sides, the same mould being re-employed with a fresh pallet and so forth.

When the object cast has set sufficiently hard to be capable of treatment, the slab is reversed, and the pallet surface plate or the mould is detached from the cast article whose surface is intersected or otherwise marked with grooves formed by the ribs and constituting imitation jointing marks. This surface may be finished by rubbing down, and the tile or brick jointing marks painted, grouted or weathered to enhance the tile or brick division effect.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. The method of forming imitation tiled or brick objects by moulding aggregate with surface grooves to imitate the jointing marks between tiles or bricks wherein the said jointing marks are produced by ribs forming a fixed part of the mould or detachable as a unit therefrom.

2. The method of forming imitation tiled or brick objects according to Claim 1 wherein the spaces between the ribs in the mould are first filled with surfacing material which is screeded off to a uniform depth before adding the final aggregate.

3. Means for moulding imitation tiled or brick objects according to the method claimed in Claim 1 or 2 comprising a mould and a detachable surface plate therefor formed with ribs to produce the jointing marks on the surface of the article produced.

4. Means for moulding imitation tiled or brick objects according to the method claimed in Claim 1 or 2 comprising a grid device adapted to be detachably connected to the mould for the purpose of producing the jointing marks on the surface of the article produced.

5. The methods of and means for the manufacture of imitation tiled or brick articles substantially as described with reference to the accompanying drawings.

6. Cast cementitious articles manufactured according to the methods and by the means claimed in any of the preceding claims.

Dated this 22nd day of April, 1931.

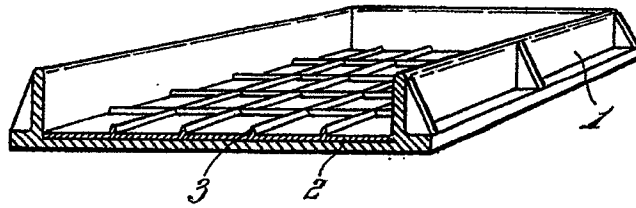
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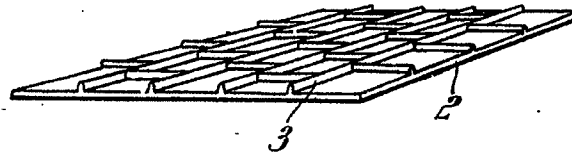
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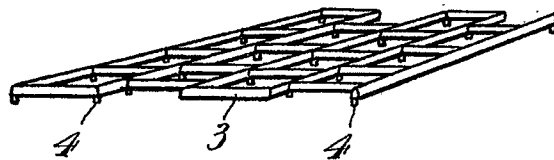
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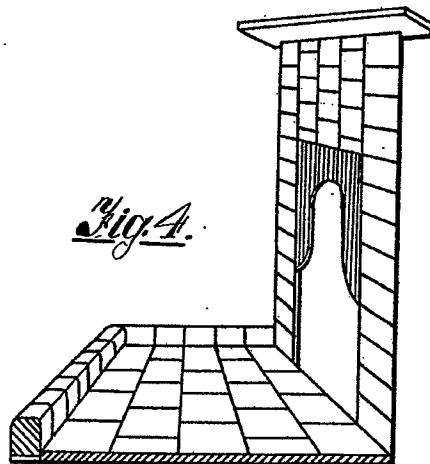
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Fig. 4.*

*[This Drawing is a reproduction of the Original on a reduced scale.]*